

B7 (SEQ ID NO: 28)

9615 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Ala Ser Cys Gly Phe

(SEQ ID NO: 30)

9616 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ala Cys Gly Phe

(SEQ ID NO: 31)

9602 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Ala Phe

(SEQ ID NO: 17)

9501 Leu Arg Ile Val Gln Cys Arg Ser Val Glu D-Ala Ser Cys D-Ala
Phe

(SEQ ID NO: 14)

9601 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Ala

(SEQ ID NO: 16)

wherein the amino acid residue abbreviations used are in accordance with the standard peptide nomenclature:

Gly = Glycine;	Ile = Isoleucine;
Glu = Glutamic Acid;	Phe = Phenylalanine;
Cys = Cysteine;	Arg = Arginine;
Gln = Glutamine;	Leu = Leucine;
Ser = Serine;	Val = Valine;
Lys = Lysine;	Ala = Alanine;
Asp = Aspartic acid;	His = Histidine;
Orn = Ornithine;	Tyr = Tyrosine;
Pen = Penicillamine (DL ² -Dimethyl-Cysteine).	

wherein all amino acids, except for glycine, are of the L-absolute configuration, unless indicated as D-absolute configuration, and the peptide has a cyclic disulfide bond between Cys(182) and Cys(189) or Pen(182) and Pen(189) as appropriate, or an organic or inorganic acid addition salt thereof.

After page 44, insert the printed Sequence Listing.

REMARKS

Applicants submit this Amendment to indicate the insertion point for the substitute Sequence Listing filed concurrently herewith. Applicants respectfully request examination on the merits of this application.

Receipt of the initial Office Action on the merits is awaited.

Respectfully submitted,

17 July 2001
Date

Stephen A. Bent
Stephen A. Bent
Reg. No. 29,768

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Versions with Markings to Show Changes Made

IN THE SPECIFICATION

Please amend the Specification as follows:

The concept of correspondence in amino acid sequences between species is well known in the biological sciences and is determined by aligning comparable sequences (including if necessary theoretical deletions) to match isofunctional or isostereo amino acids thereby maximizing homology. The published corresponding sequences of the C-terminus region of the growth hormone of selected mammals are tabulated below²⁶, using standard single letter notation: (SEQ ID NOS 34-52, respectively in order of appearance)

Please replace the paragraph beginning on page 23 at line 1 with the following rewritten paragraph:

A. Synthesis of pentadecapeptide comprising amino acid residues 177-191 of native human growth hormone, designated as hGH (177-191) (Ref No. 9401): (SEQ ID NO: 1)

Please replace the paragraphs beginning on page 26 at lines 21 and 29 16 with the following rewritten paragraphs, respectively:

B. Synthesis of pentadecapeptide (Ref No. 9404): (SEQ ID NO: 1)

C. Synthesis of the pentadecapeptide (Ref No. 9410): (SEQ ID NO: 1)

Please replace the paragraphs beginning on page 27 at lines 7 and 23 16 with the following rewritten paragraphs, respectively:

D. Synthesis of the pentadecapeptide (Ref No. 9405): (SEQ ID NO: 1)

Leu¹-Arg-Ile-Val-Gln-Cys-Lys-Ser-Val-Glu-Gly-Ser-Cys-Gly-Phe¹⁵
(cyclic disulfide) (SEQ ID NO: 10)

Please replace the paragraph beginning on page 31 at line 10 with the following rewritten paragraph:

Tyr-Leu-Arg-Ile-Val-Gln-Cys-Arg-Ser-Val-Glu-Gly-Ser-Cys-Gly-Phe (cyclic disulfide) (SEQ ID NO: 19)

IN THE CLAIMS:

Please amend the claims as follows:

13. (Amended) A peptide of the sequence:

X^1 m-Leu-Arg-Ile-Val-Gln-Cys-Arg-Ser-Val-Glu-Gly-Ser-Cys-Gly-Phe- X^2 n

(SEQ ID NO: 2)

wherein X^1 and X^2 are each selected from the group consisting of L- or D- Arg, His, Lys and Tyr, and m and n are each 0, 1, 2 or 3 with the proviso that at least m or n is 1;

a cyclic disulfide thereof or an organic or inorganic acid addition salt thereof.

14. (Amended) A peptide of the sequence:

Y^1 -Leu-Arg-Ile-Val-Gln-Cys-Arg-Ser-Val-Glu-Gly-Ser-Cys-Gly-Phe

(SEQ ID NO: 3)

wherein Y^1 is selected from the group consisting of the desamino form (H), acetyl ($\text{CH}_3\text{CO}-$) and other acyl groups;

a cyclic disulfide thereof or an organic or inorganic acid addition salt thereof.

15. (Amended) A peptide of the sequence: (SEQ ID NO: 4)

Leu-Arg-Ile-Val-Gln-Cys-Arg-Ser-Val-Glu-Gly-Ser-Cys-Gly-Phe- Y^2

wherein Y^2 is selected from the group of CONH_2 and alkyl amide groups;

a cyclic disulfide thereof or an organic or inorganic acid addition salt thereof.

16. (Amended) A peptide which is selected from the group consisting of:

Ref No.

STRUCTURE

(SEQ ID NO: 15)

9502 Leu Arg Ile Val Gln Pen Arg Ser Val Glu Gly Ser Pen Gly
Phe

(SEQ ID NO: 8)

9405 CH₃CO- Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly
Phe

(SEQ ID NO: 12)

9410 H - Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly
Phe

(SEQ ID NO: 7)

9404 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly
Phe - CONH₂

(SEQ ID NO: 10)

9407 Leu Arg Ile Val Gln Cys Lys Ser Val Glu Gly Ser Cys Gly
Phe

(SEQ ID NO: 11)

9408 Leu Arg Ile Val Gln Cys Lys Ser Val Glu Gly Ser Cys Gly
Phe

|_____|(amide bond)

9604 Tyr Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly
Phe

(SEQ ID NO: 19)

9605 Lys Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly
Phe

(SEQ ID NO: 20)

9618 Lys Lys Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe

(SEQ ID NO: 33)

9607 Ala Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe

(SEQ ID NO: 22)

9606 Leu Lys Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe

(SEQ ID NO: 21)

9608 Leu Arg Ala Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe

(SEQ ID NO: 23)9403 Leu Arg Lys Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe(SEQ ID NO: 6)9609 Leu Arg Ile Ala Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe(SEQ ID NO: 24)9610 Leu Arg Ile Val Ala Cys Arg Ser Val Glu Gly Ser Cys Gly Phe(SEQ ID NO: 24)9612 Leu Arg Ile Val Gln Cys Arg Ala Val Glu Gly Ser Cys Gly Phe(SEQ ID NO: 27)9613 Leu Arg Ile Val Gln Cys Arg Ser Ala Glu Gly Ser Cys Gly Phe(SEQ ID NO: 28)9615 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Ala Ser Cys Gly Phe(SEQ ID NO: 30)9616 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ala Cys Gly Phe(SEQ ID NO: 31)9602 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Ala Phe(SEQ ID NO: 17)9501 Leu Arg Ile Val Gln Cys Arg Ser Val Glu D-Ala Ser Cys D-Ala
Phe(SEQ ID NO: 14)9601 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Ala(SEQ ID NO: 16)

wherein the amino acid residue abbreviations used are in accordance with the standard peptide nomenclature:

Gly	=	Glycine;	Ile	=	Isoleucine;
Glu	=	Glutamic Acid;	Phe	=	Phenylalanine;
Cys	=	Cysteine;	Arg	=	Arginine;
Gln	=	Glutamine;	Leu	=	Leucine;
Ser	=	Serine;	Val	=	Valine;
Lys	=	Lysine;	Ala	=	Alanine;
Asp	=	Aspartic acid;	His	=	Histidine;
Orn	=	Ornithine;	Tyr	=	Tyrosine;
Pen	=	Penicillamine (β,β'-Dimethyl-Cysteine).			

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